



Kenton C. Ward, CFM Surveyor of Hamilton County Phone (317) 776-8495 Fax (317) 776-9628 Suite 188 One Hamilton County Square Noblesville, Indiana 46060-2230

June 9, 2014

To: Hamilton County Drainage Board

Re: R. J. Craig Drain, George White Arm, Maple Street Reconstruction

Attached are plans for the proposed reconstruction of the R. J. Crain Drain, George White Arm No. 3. The proposal is to replace the drain in the Maple Street right-of-way, owned by the Town of Fishers per the 'R. J. Craig Regulated Drain Reconstruction - Maple Street' project plans by A&F Engineering, Job No. AF-14039P, dated 6/5/2014.

Per the plans, a portion of the existing drain will be replaced by a new storm sewer.

This line will consist of the following pipes:

141' of 12" RCP

278' of 15" RCP

90' of 18" RCP

The total length of the new reconstructed drain shall be 509 feet, including new pipe and structures. The 318 feet of original drain between Sta. 0+00 and 3+18 shall be vacated. This proposal will add 191 feet to the drain's total length.

The original drain was previously referenced in my report for the 1997 reconstruction of the George White Arm 3 that was approved at hearing by the Board on November 27, 1997 as recorded in Drainage Board Minutes Book 4 page 482. Note: The drain immediately downstream of this project is also proposed for reconstruction at this time. See my report called "R. J. Craig Drain, George White Arm, Fishers Maple Street Redevelopment" for more information on that project.

This proposal includes the drain route between storm structures 36, 201, 202, 203, 204, 206, 207, and 208 per the A&F plans. (Note: Str. 205 is called out on the plans as a pipe stub to Str. 204 for future tie-in, but is not to be considered part of the regulated drain). The new drain pipe shall be located between A&F Sta. 16+06.00 (Str. 36) and 20+60.72 (Str. 208). This includes the main trunk line that runs along the east side of Maple Street and two pipes that cross Maple Street (Str. 202-203 and 204-206).

The fund is assessed at \$5.00 per acre, \$25.00 minimum which brings in \$40,678.70 annually. Currently the R. J. Craig maintenance fund has a balance of \$151,685.30 the engineering contract for the design of this project by A & F Engineering is \$21,570.00. After payment of his claim the fund balance will be \$144,451.30. The engineer's cost estimate for the project is \$163,150.87.

I believe there are three funding options for the Board to consider:

- 1. Use the existing maintenance fund for the cost of the project taking the \$18,699.57 short fall out of the General Drain Improvement Fund (GDIF) to be paid back using 2015 collections.
- 2. Take 75% of the maintenance fund under IC 36-9-27-45.5 which is \$108,338.48 and fund the remaining \$54,812.39 through a reconstruction assessment for those properties benefited on Maple Street. The assessment would be \$28,400.20 per acre.
- 3. Take the entire maintenance fund and fund the \$18,699.57 short fall through a reconstruction assessment on those properties on Maple Street benefitting which would be an assessment of \$9,673.35 per tract.

The reconstruction will take place in the drain's current location, no additional easement is required. Where the drain is being extended on the north end of the project, a grant of easement will be submitted on the Meyer-Najem project currently under review.

I recommend that this drain be classified as an urban drain.

I recommend the Board set a hearing date for July 28, 2014.

Sincerely

Kenton Q. Ward

Hamilton County Surveyor

KØW/stc

# R.J. Craig Drain, Geo. White Arm

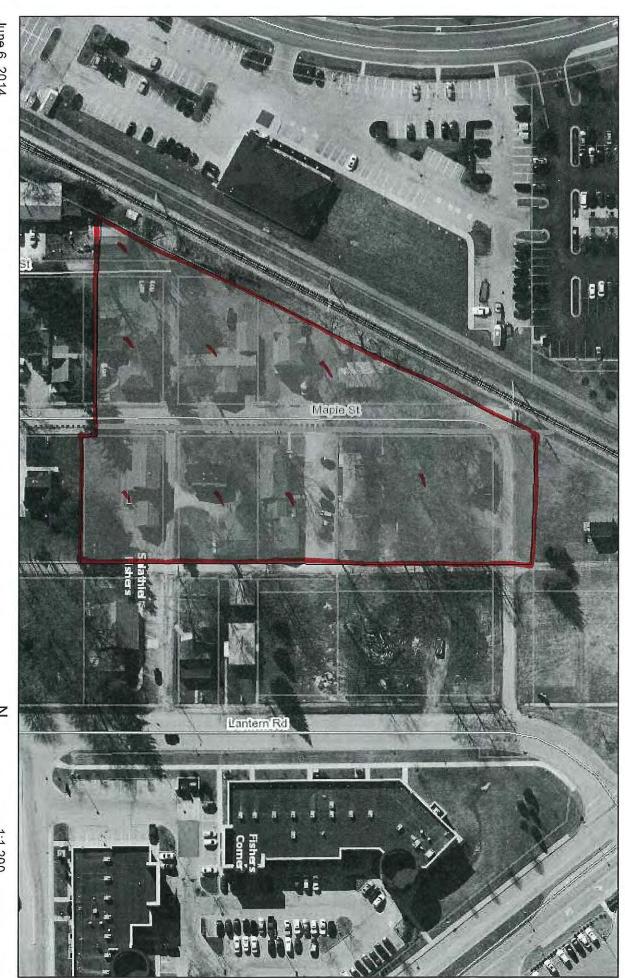
Maple Street Reconstruciton Cost Estimate \$163,150.87

Vacate Sta 0 to 3+18 of Geo. White & replacing with 509' of new drain. This proposal will add 191' to the drain's total length. Easement for extended pipe will be 75' per statue until addressed with a non-enforcement for the Meyer-Najem project. \*Cost of reconstruction to be paid from the maintenance fund.

\*No change in current maintenance assessment at this time. Hearing: 07/28/14

				Option 1
Parcel	Owner	Description	Benefit	Recnst Assmt
15-11-31-03-10-001.000	High Alpha II LLC	S31 T18 R5 High Alpha 2 Lot Pt 1	n/a	*
15-10-36-04-10-001 000	High Alpha II LLC	S36 T18 R4 High Alpha 2 Lot Pt 1	n/a	*
15-10-36-04-10-002.000	Fishers Town Hall Bldg Corp	S36 T18 R4 High Alpha 2 Lot Pt 1	0.40	+
15-10-36-04-05-008.000	11720 Maple LLC	S36 T18 R4 Salathiel Fishers Sec. 1 Lot 32	0.25	*
15-10-36-04-05-009.000	Town of Fishers	S36 T18 R4 Salathiel Fishers Sec. 1 Lot 31	0.25	*
15-10-36-04-05-010.001	Holly, Diane L	S36 T18 R4 Salathiel Fishers Sec. 1 Lot 30	0.25	*
15-10-36-04-04-001.000	Bentley, Fred	S36 T18 R4 Fishers Original Lot 20,21&22	0.27	ŧ
15-10-36-04-04-002.000	McManus, John T & Jill M	S36 T18 R4 Fishers Original Lot 19	0.24	•
15-10-36-04-04-003.000	11697 Maple LLC	S36 T18 R4 Fishers Original Lot Pt 18	0.21	,
15-10-36-04-03-001.000	Town of Fishers	S36 T18 R4 Fishers Original Lot 10 & 9	90.0	*
15-10-36-04-04-004.000	Town of Fishers	S36 T18 R4 Fishers Original Lot Pt 17	n/a	*
15-10-36-04-04-004.001	11683 Maple LLC	S36 T18 R4 Fishers Original Lot Pt17 & Pt18	n/a	*
15-10-36-04-04-006.000	11671 Maple LLC	S36 T18 R4 Fishers Original Lot 16	n/a	*
15-10-36-04-04-007.000	Maxey, Kathryn L	S36 T18 R4 Fishers Original Lot 15	n/a	*
15-10-36-04-04-008.000	Cook, Berthel	72	n/a	*
15-10-36-04-04-009.000	Driscoll Properties LLC	S36 T18 R4 Fishers Original Lot 13	n/a	*
15-10-36-04-04-010.000	Old Towne Center LLC	S36 T18 R4 Fishers Original Lot 12	n/a	*
15-10-36-04-04-011.000	Old Towne Center LLC	S36 T18 R4 Fishers Original Lot 11	n/a	*
15-10-36-04-05-010.000	Town of Fishers	S36 T18 R4 Salathiel Fishers Sec. 1 Lot 29	n/a	*
15-10-36-04-05-011.000	Walden, Saudra L	S36 T18 R4 Salathiel Fishers Sec. 1 Lot 28	n/a	*
15-10-36-04-05-012.000	Kay2Jay Bye LLC	S36 T18 R4 Salathiel Fishers Sec. 1 Lot 27	n/a	*
15-10-36-04-05-013.000	WES Investments LLC	S36 T18 R4 Salathiel Fishers Sec. 1 Lot 26	n/a	*
15-10-36-04-05-014.000	Town of Fishers Redevelopment	S36 T18 R4 Salathiel Fishers Sec. 1 Lot 25	n/a	*
15-10-36-04-05-015.000	Arvilla & Company LLC	S36 T18 R4 Salathiel Fishers Sec. 1 Pt 24	n/a	*
15-10-36-04-05-016.000	Town of Fishers	S36 T18 R4 Salathiel Fishers Lot 23 & Pt24	n/a	*
99-99-99-99-99-017	Hoosier Heritage Port Authority	S36 T18 R4 Railroad	n/a	*
99-99-99-99-99:007	Town Of Fishers	S36 T18 R4 Maple Street	n/a	*
Parcels: 2/ notfried;			1.93	

# Maple Street Reconstruction



June 6, 2014

Drainage Structures Regulated Drains Text

:

Closed

SSD

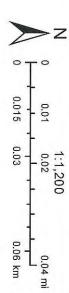
Subdivision Drainage Structures

Open

SSD

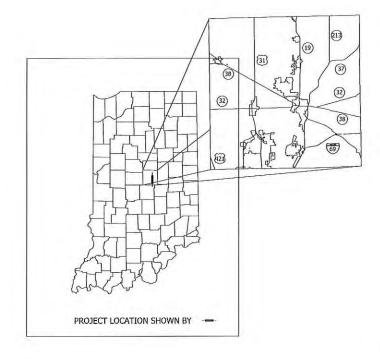
Open

Closed



# HAMILTON COUNTY

# RJ CRAIG LEGAL DRAIN RECONSTRUCTION MAPLE STREET



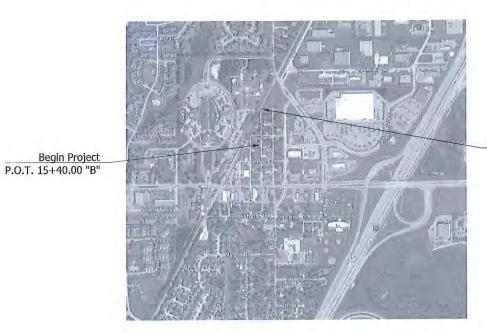
Reconstruction of the Legal Drain on Maple Street from Fishers Corner Blvd. to approximately 475' North In Section 36, T-18-N, R-4-E, in Delaware Township, Hamilton County, State of Indiana.

Gross Length: 0.09 ml Net Length: 0.09 ml

N 39°57'27" W 86°00'52"

<u>SCALES</u>

Plan: 1" = 20' Profile: 1" = 5'



SCALE: 1"=500"

End Project P.O.T. 20+49.67 "B"

OFFICE OF HANILTON COUNTY SURVEYOR

- The design and construction shall comply with the current Hamilton County
  construction specifications and standard construction details. The omission of any
  current standard detail does not relieve the contractor from this requirement.
   Indiana Department of Transportation Standard Specifications dated 2014 to be used
  with these plans.



PLANS PREPARED BY:	A & F ENGINEERING CO., LLC	(317) 202-0864
		PHONE NUMBER
CERTIFIED BY:		3-7-14
- 12 3 4 5 5 1 4 4		DATE
APPROVED FOR LETTING:		
· data help a country		DATE

	BRIDGE FILE									
		N/A								
	DI	ESIGNATIO	ON							
SURVEY BOOK	12-2	SHEETS								
N/A	1	of								
CONTRACT		PROJECT								
		-								

# UTILITIES

UTILITY	OWNER	ADDRESS
GAS	Vectren Energy	Joanie Clark 16000 Allisonville Road Noblesville, IN 46061 317-776-5532 Jelark <b>©</b> vectren.com
ELECTRIC	Duke Energy Indiana, Inc.	Tracy Grady 100 South Mill Creek Road Noblesville, IN 46060 317—776—5350 tracy.grady@duke-energy.com
CABLE: TV	Comcast	Matt Stringer 5330 E. 65th Street Indianopolis, IN 46220 317-774-3384 matthew_stringer@cable.comcast.com
TELEPONE	AT&T Indiana	Brian Crovens 5858 N. College Avenue Indianapolis, IN 45220 317—252—5003 bc3785@att.com
MATER	Citizens Energy Group	Chris Brumfield 1220 Waterway Boulevard Indianapolis, IN 46202 317-263-6382 cbrumfield@citizensenergygroup.com
SANITARY	SAMCO/HSE Utilities	Jim Hort 11091 Lakeside Drive Fishers, IN 46038 317-577-1150 jhart@samcoinc.us

	REVISION	15
SHEET NO.	DATE	REVISED
	4	

	R/W INDEX
SHEET NO.	DESIGNATION
-	

## GENERAL NOTES

- All Earth Shoulders, median areas, and cut and fill slopes shall be plain or mulched seeded except where sodding is specified.

  \*\* Clearing and removal of woody vegetation will be kept to a minimum between construction limits and right-of-way.

  \*\* Tack Coat shall be placed on new and existing bituminous before a new lift of bituminous is added.
- \*\* Represents General Notes required,

# **INDEX**

SHEET NO.	SHEET DESIGNATION
1	Title
2	Index and General Notes
3-4	Plan and Profile
5	Structure Data Table
6	Standard Details
7	As-Built Spreadsheet
-	

HOLEY MOLEY SAYS CALL

-800-382-5544



AT LEAST TWO FULL WORKING DAYS BEFORE YOU DIG

2 WORKING DAYS
CALL TOLL FREE BEFORE YOU DIG
1-800-382-5544
UNDERGROUND PROTECTION CENTER

# VERIFICATION NOTE

Contractor shall verify all dimensions and dearances and all existing field conditions before starting construction, Commencement of work constitutes acceptance of conditions.

Should different conditions be encountered, contact the engineer or designer before proceeding will work

MAY 1 6 2014

\*\*A&F ENGINEERING
Transportation & Site Engineering
Creating Order Since 1966

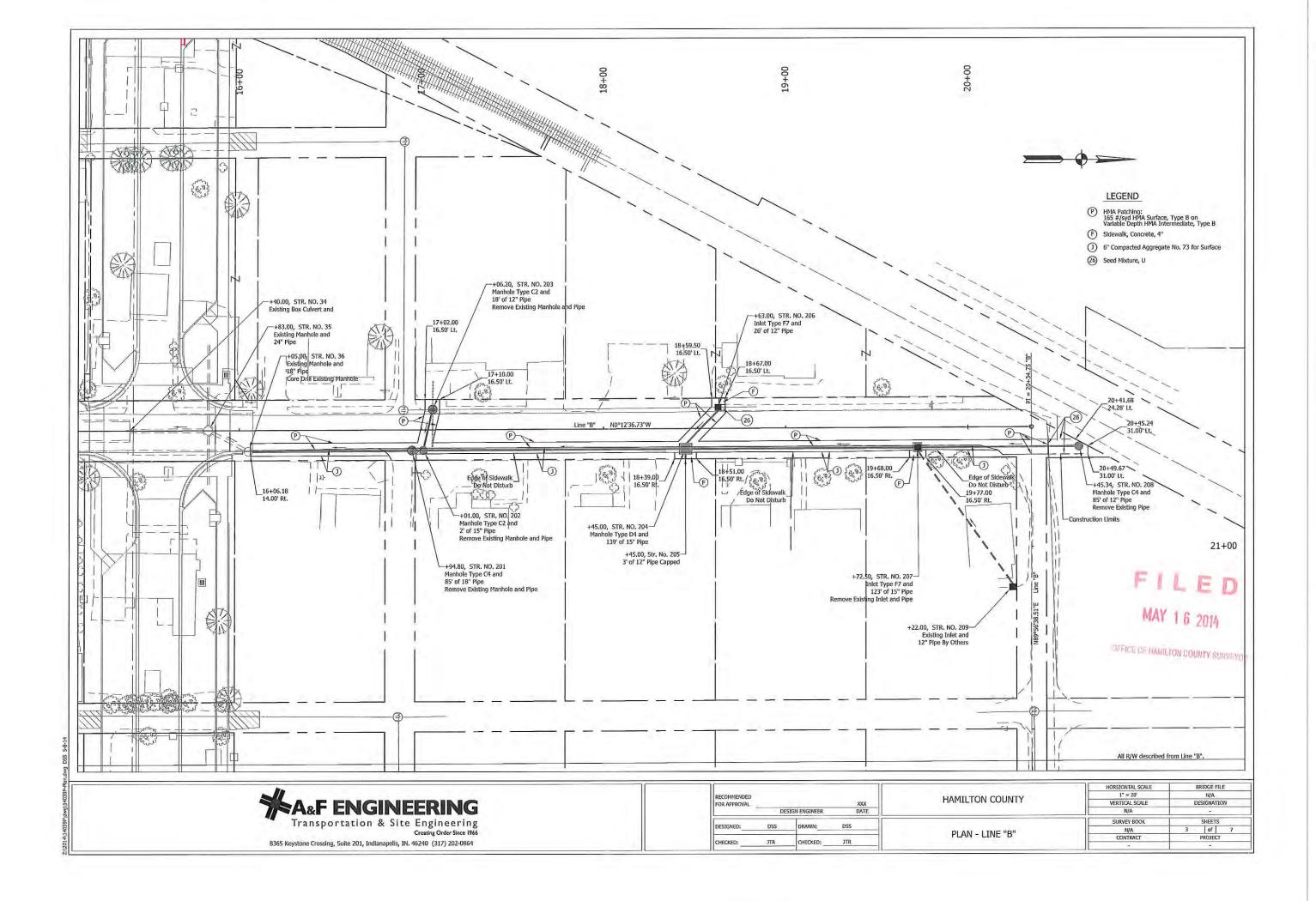
8365 Keystone Crossing, Suite 201, Indianapolis, IN. 46240 (317) 202-0864

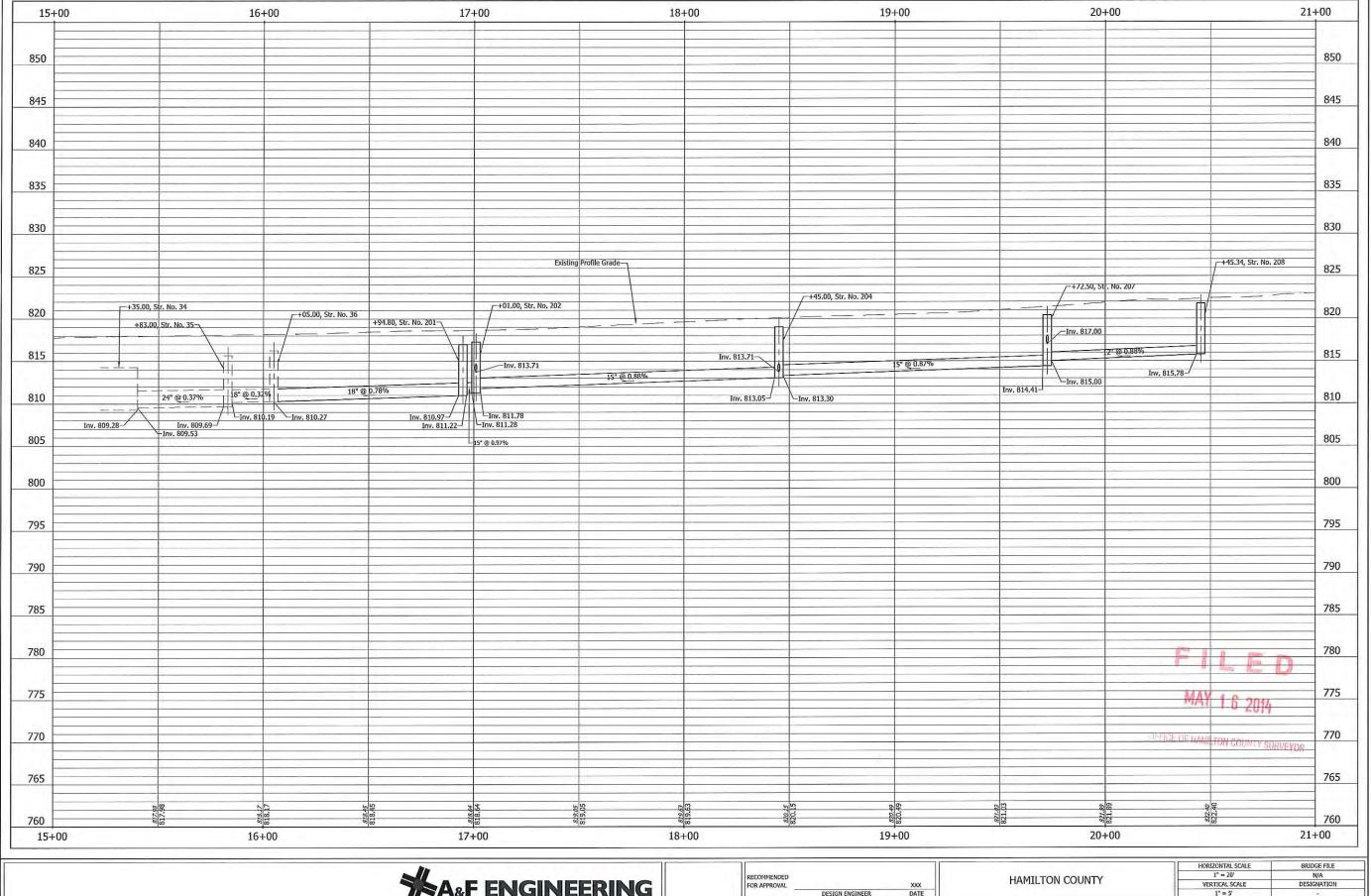
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HAMILTON COUNTY	VERTICAL SCALE	DESIGNATION				
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	SURVEY BOOK		SHEETS			
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INDEX & GENERAL NOTES	CONTRACT	PROJECT				

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A&F ENGINEERING

Transportation & Site Engineering

Creating Order Since 1966

8365 Keystone Crossing, Suite 201, Indianapolis, IN. 46240 (317) 202-0864

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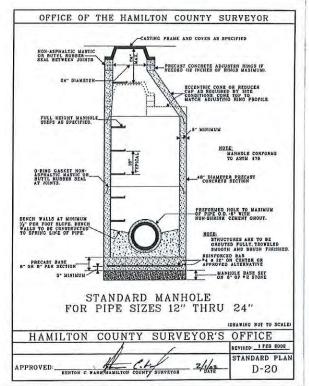
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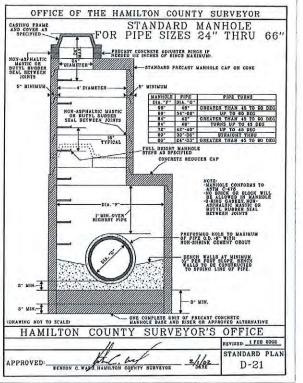
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					IN.			LFT		LFT	ELEV.	ELEV.	YR	IS			TYPE	CYS	TONS	CYS	LFT	EA.	TYPE	SLOPE	EA.	SIZE	SLOPE	EA.	8	
	Line "B"																													
34	15+40.0	+	x	+			Existing Box Culvert				809.28																			
35	15+83.0		X		Ex. 24		Existing J4 Manhole				809.69	809.53																	34	
36	16+05.0				Ex. 18		Existing C2 Manhole				810.27	810.19																	35	Core Drill Existing Manhole
201	16+94.80			x	18		Manhole Type C4	85			810.97	810.27						14 32											1	Remove Existing Manhole & Pipe
								Marine.																						Remove Existing Manhole & Pipe
202	17+01.00			X	15		Manhole Type C2	2			811.28	811.22																		
203	17+06.20	X			12		Manhole Type C2	18			813.90	813.71																		Remove Exisitng Manhole & Pipe
204	18+45.0			X	15		Manhole Type D4	139			813.05	811.78																	202	
205	18+45.0	-		X	12		Pipe	3		11-1	813.74	813.71																-	204	
206	18+63.0	X			12	100	Inlet Type F7	26			813.90	813.71																	204	
207	19+72.50			X	15		Inlet Type F7	123			814.41	813.30																	204	Remove Existing Inlet & Pipe
208	20+45.34	X			12		Manhole Type C4	85			815.78	815.00																	207	Remove Existing Pipe
209	20+22.0			x	Ex. 12		Existing Inlet				817.91	817.00																	207	Pipe by Others
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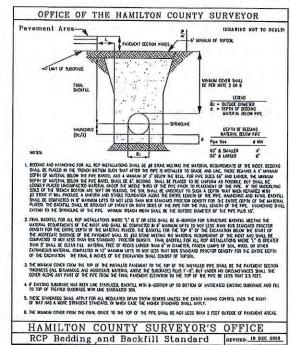


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HAMILTON COUNTY	VERTICAL SCALE	DESIGNATION							
	NONE	N/A							
	SURVEY BOOK	SHEETS							
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STRUCTURE DATA TABLE	CONTRACT	PROJECT							
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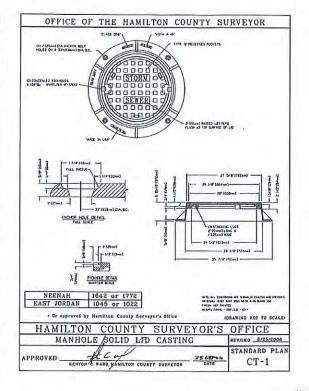


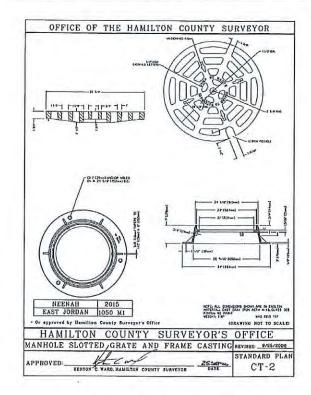


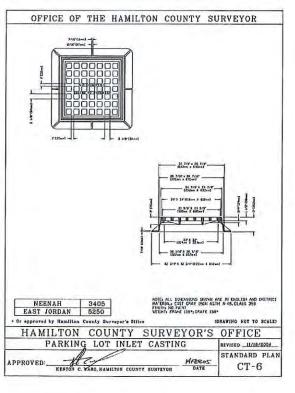
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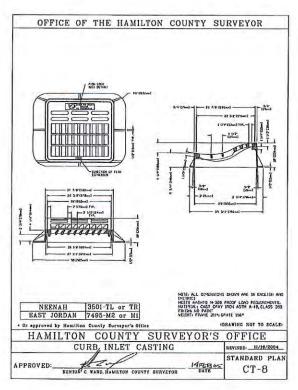
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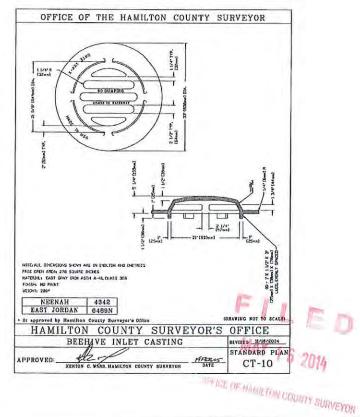
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8365 Keystone Crossing, Suite 201, Indianapolis, IN. 46240 (317) 202-0864

					HORIZONTAL SCALE	BF	RIDGE FIL	E	
RECOMMENDED				LIAMTI TON COUNTY	N/A	N/A			
OR APPROVAL			XXX	HAMILTON COUNTY	VERTICAL SCALE	DESIGNATION			
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Julius -	area Taranner				SURVEY BOOK		SHEETS		
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Rose	STR_NU	STR_TY	TOP_OF_CAS	CAST_TYPE	STR_SHAPE	NUM_OF_INV	II_INV_ELI	E IL_DIE	II_DIA	TAM_II	II_CLASS	12_INV_ELI	I2_DIR	12_DIA	12_MAT	12_CLASS	B_INV_ELE	13_DIR 13	DIA 1	13_MAT	I3_CLASS	14_INV_EL	E I4_DIR	14_D1A	I4_MAT	14_CLASS	PROJECT	SOURCE	VER_REF	ENG_CMPY
1	(34)	CONCRETE BOX CULVERT	817.96		RECTANGULAR	1	809.53	N	24	RCP	CLASS'III																MAPLE STREET	AS BUILT	VER	A&F ENGINEERING
2	(35)	MANHOLE	818.12		ROLND	4	811.69	NE	18	RCP	CLASS III	809.53	8	24	RCP	CLASS III				-							MAPLE STREET	AS BUILT	VER	A&F ENGINEERING
3	(36)	MANHOLE	817.78		ROUND	2	81027	N	18	RCP	CLASS III	810.27	SW	18	RCP	CLASS III								- 3			MAPLE STREET	AS BUILT	VER	A&F ENGINEERING
4	(201)	MANHOLE	818.42		ROUND	2	811.22	N	15	RCP	CLASS III	810 97	S	18	RCP	CLASS III				-		1					MAPLE STREET	AS BUILT	VBR	A&F BNGINBBRING
5	(202)	MANHOLE	818.3		ROLND	3	811.78	N	15	RCP	CLASS III	811.28	S	15	RCP	CLASS III	813.71	NW	12	RCP	CLASS III						MAPLE STREET	AS_BUILT	VER	A&F ENGINEERING
6	(203)	MANHOLE	818.35		ROUND	1	813.90	SE	12	RCP	CLASS III	813.90	W	12	RCP	CLASS III			100					-			MAPLE STREET	AS BUILT	VBR	A&F ENGINEERING
7	(204)	MANHOLE	819.71		RECTANGULAR	4	813.30	N	15	RCP	CLASS III	813.71	E	12	RCP	CLASS III	813.05	S	15	RCP	CLASS III.	813.71	MY	12	RCP	CLASS III	MAPLE STREET	AS BUILT	VER	A&F ENGINEERING
8	(206)	YARD INLET	819.77		SQUARE	1	813.90	SE	12	RCP	CLASS III	p		(B.30)		15. m. m. m. s. I											MAPLE STREET	AS BUILT	VER	A&F ENGINEERING
9	(207)	BREHIVE INLET	820.95	4	SQUARB	3	81500	N	12	RCP	CLASS III	814.50	NE	12	RCP	CLASS III	814.41	S	15	RCP	CLASS III		-				MAPLE STREET	AS_BUILT	VER	A&F ENGINEERING
10	(205)	MANHOLE	822.01		ROLND	1	81578	S	12	RCP	CLASS III																MAPLE STREET	AS BUILT	VER	MBYER NAJEM
11	(209)	YARD INLET	822.89		SQUARE	1	817.91	SW	12	RCP	CLASS'III																MAPLE STREET	AS_BUILT	VER	A&F ENGINEERING
12									1							1							1					AS BUILT	VER	

Rose	UPS_STR_ID	DOW_STR_II	SLOPE	DIMENSIONS	STR_SHAPE	PIPE_LEN	MATER	PIPE_CLASS	LEN_GRA_FI	AVG_DEPTH	UPST_INVER	DOWN_INVER	SLOPE_ CHEC	PROJECT	SOURCE	VER_REF	ENG_CMPY	AB_ID	DEVELOPER
1	35	34	0.37%	24	ROUND	40	RCP	CLASS II	40	6.5	809.69	809.53	0.004	Maple Street	AS_BUILT	VER	A&F ENGINEERING		
2	36	35	0.32%	18	ROUND	20	RCP	CLASS II	20	6.5	810,27	810.19	0.004	Maple Street	AS_BUILT	VER	A&F ENGINEERING		
3	201	36	0.78%	18	ROUND	85	RCP	CLASS II	85	6.5	810.97	810.27	0.0082	Maple Street	AS BUILT	VER	A&F ENGINEERING		
4	202	201	0.97%	15	ROUND	2	RCP	CLASS II	2	6	811.28	811.22	0.03	Maple Street	AS BUILT	VER	A&F ENGINEERING		
5	203	202	0.83%	12	ROUND	18	RCP	CLASS II	18	4	813.90	813.71	0.0106	Maple Street	AS_BUILT	VER	A&F ENGINEERING		
6	204	202	0.88%	15	ROUND	139	RCP	CLASS II	139	5.5	813.05	811.78	0.0091	Maple Street	AS_BUILT	VER	A&F ENGINEERING		
7	205	204	0.01%	12	ROUND	3	RCP	CLASS II	3	4	813.74	813.71	0.01	Maple Street	AS BUILT	VER	A&F ENGINEERING		
B	206	204	0.66%	12	ROUND	26	RCP	CLASSII	26	4	813.90	813.71	0.0073	Maple Street	AS_BUILT	VER	A&F ENGINEERING		
9	207	204	0.87%	15	ROUND	123	RCP	CLASS II	123	5.5	814.41	813.30	0.009	Maple Street	AS_BUILT	VER	A&F ENGINEERING		
10	208	207	0.88%	12	ROUND	85	RCP	CLASS II	85	3.5	815.78	815.00	0.0092	Maple Street	AS BUILT	VER	MEYER NAJEM		
21	209	207	0.99%	12	ROUND	89	RCP	CLASS II	89	5.5	817.91	817.00	0.0102	Maple Street	AS_BUILT	VER	A&F ENGINEERING		

4	ΔεF	FNG		NF	FRING
11/	Transpo	ortation	&	Site	ERING Engineering Creating Order Since 1966
8365 1	Keystone Crossin	g, Suite 201, Ind	iana	polis, IN.	46240 (317) 202-0864

RECOMMENDED				HAMILTON COUNTY	HORIZONTAL SCALE N/A	BRIDGE FILE N/A				
OR APPROVAL			XXX		VERTICAL SCALE	DESIGNATION				
	DE	SIGN ENGINEER	DATE		N/A					
	and laborate		pcc		SURVEY BOOK		SHEETS			
DESIGNED:	DSS	DRAWN:	DSS	AC DUILT CODEADCHEET	N/A	7	of	7		
CHECKED:	KED: JTR	CHECKED:	JTR	AS-BUILT SPREADSHEET	CONTRACT		PROJECT			
THECKED:	JIK	CHECKED:	JIK							